

Customer No.: 31561
Docket No.: 10547-US-PA
Application No.: 10/710,020

AMENDMENT

To The Claims

Claim1 (original) A process for fabricating bumps, comprising the steps of:
providing a wafer having a plurality of bonding pads and a passivation layer thereon, wherein the passivation layer is disposed on a surface of the wafer and exposes the bonding pads; forming a photoresist layer over the wafer, wherein the photoresist layer has a plurality of openings with different widths and the openings are positioned corresponding to the bonding pads; immersing the wafer into an electrolytic solution; and performing an electroplating operation by providing an increasing step current to the electrolytic solution.

Claim2 (original) The bump fabrication process of claim 1, wherein the increasing step current is set between I_{min} and I_{max} , wherein I_{min} is a smallest current to start the electroplating operation and I_{max} is a largest permissible current for performing the electroplating operation.

Claim3 (original) The bump fabrication process of claim 1, wherein the step current comprises a plurality of linear currents.

Claim4 (original) The bump fabrication process of claim 3, wherein the step of performing an electroplating operation further comprises stopping providing the step current for a brief period, so that the electroplating operation is temporarily suspended.

Customer No.: 31561
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Application No.: 10/710,020

Claim5 (original) The bump fabrication process of claim 1, wherein the step current comprises a plurality of pulse currents, each having a peak current and a trough current.

Claim6 (original) The bump fabrication process of claim 5, wherein the peak current is set between I_{min} and I_{max} .

Claim7 (original) The bump fabrication process of claim 5, wherein the trough current is selected from the group consisting of a positive current smaller than I_{min} , a zero current and a negative current.

Claim8 (original) The bump fabrication process of claim 1, wherein the step current comprises at least a pulse current and a plurality of linear currents and the pulse current comprises a peak current and a trough current.

Claim9 (original) The bump fabrication process of claim 8, wherein the peak current is set between I_{min} and I_{max} .

Claim10 (original) The bump fabrication process of claim 8, wherein the trough current is selected from the group consisting of a positive current smaller than I_{min} , a zero current and a negative current.

Customer No.: 31561
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Claim 11 (new) The bump fabrication process of claim 1, wherein at least one of the openings has an aspect ratio of greater than 1.2.